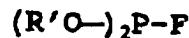


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ETHYL



Formula VI

D  
C. M. T. S.  
173

wherein R' is a substituted aryl group wherein the substituents are selected from sec-alkyl, tert-alkyl, aralkyl, cycloalkyl, hydroxy, alkoxy, aryloxy, halo, acyloxy, and alkoxy carbonyl alkyl:]

T 270X



Formula II

I 171 173  
 [ ] [ ]  
 I 171 173  
 [ ]

wherein R<sup>1</sup> and R<sup>2</sup> are substituted or unsubstituted [aryl] phenyl groups wherein the [substituent] substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, [hydroxy,] alkoxy, aryloxy, and halo[:], and X is selected from the group consisting of a single bond connecting R<sup>1</sup> and R<sup>2</sup> and divalent bridging groups selected from divalent aliphatic hydrocarbon groups containing 1-12 carbon atoms, —O— and —S<sub>q</sub>— wherein q is an integer from 1 to 3[:], and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl.

T 271



Formula III



27

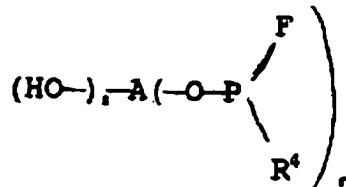
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ETHYL

D  
1  
Methyl  
Oxy

wherein R is a substituted or unsubstituted aryl group wherein the substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, hydroxy, alkoxy, aryloxy, halo, alkoxycarbonyl, alkoxycarbonyl-alkyl and acyloxy, and R<sup>3</sup> is selected from the group consisting of alkyl, cycloalkyl, aralkyl, aryl, substituted aryl, alkoxy, cycloalkoxy and aralkoxy; and

T 28°



Formula IV

wherein A is a mono- or poly-nuclear aromatic group, R<sup>4</sup> is independently selected from fluorine, aryloxy, alkylaryloxy, alkoxy and polyalkoxy, r is an integer from 1 to 4, s is an integer from 0 to 3 and (r + s) equals the valence of A.]

173

171 173 [2. A compound of claim 1 namely bis(2,6-di-tertbutylphenyl) fluorophosphite.]

171 173

[3. A compound of claim 1 namely: bis(2,4-di-tertbutylphenyl) fluorophosphite.]

171

173

[4. A compound of claim 1 namely bis(4-octadecyloxycarbonylethyl-2,6-di-tert-butylphenyl) fluorophosphite.]

173

[6. A compound of claim 1 namely: bis-difluorophosphite ester) of 4,4'-methylenebis(2,6-di-tert-butylphenol).]

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ETHYL

I 171 173  
[D2] 171 173

8. (Amended) [Organic material] A polymer of an olefinically unsaturated monomer normally susceptible to gradual oxidative degradation when in contact with oxygen, [said organic material] and having incorporated therein by mixing or spraying [containing] an antioxidant amount of an aromatic fluorophosphorus compound, said compound being characterized by having at least one benzene group bonded through oxygen to a trivalent phosphorus atom and at least one fluorine atom bonded to said phosphorus atom.

9. An organic composition of claim 8 wherein said fluorophosphorus compound is selected from the group consisting of compounds having the structures:



Formula I

I 171 173  
[ ]  
I  
[ ]

wherein R is a substituted or unsubstituted [aryl] phenyl group wherein the substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, [hydroxy,] alkoxy, aryloxy, halo, alkoxycarbonyl, alkoxycarbonylalkyl and acyloxy and n is 1 or 2, and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl;

T290X



Formula II

29

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ETHYL

I 171 173 wherein R<sup>1</sup> and R<sup>2</sup> are substituted or unsubstituted [aryl] phenyl groups wherein the substituents are selected from alkyl, aryl, aralkyl, cycloalkyl, [hydroxy,] alkoxy, aryloxy and halo, and X is selected [from] from the group consisting of a single bond connecting R<sup>1</sup> and R<sup>2</sup> and divalent bridging groups selected from divalent aliphatic hydrocarbons containing 1-12 carbon atoms,

I 171 173 —O— and —S<sub>q</sub>— wherein q is an integer from 1 to 3[;], and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl; and

T300X

R-O

\

P-F

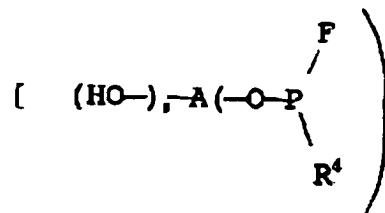
Formula III

/

R<sup>3</sup>

I 171 173 wherein R is as previously defined for Formula I and [R<sub>3</sub>] R<sup>3</sup> is selected from the group consisting of alkyl, cycloalkyl, aralkyl, aryl, substituted aryl, alkoxy, cycloalkoxy, aryloxy and

I 171 173 aralkoxy[; and], and wherein aryl is selected from the group consisting of phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl and 4-sec-hexylphenyl.



Formula IV

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ETHYL

D2  
P.M.  
C.M. 173  
wherein A is a mono or polynuclear aromatic group, R<sup>4</sup> is independently selected from fluorine, aryloxy, alkaryloxy, alkoxy and polyalkoxy and r is an integer from 1 to 4, s is an integer from 0 to 3 and (r+s) equals the valence of A].

171

[10. A composition of claim 8 wherein said organic material is a polymer of an olefinically unsaturated monomer.]

I 171 173 11. A composition of claim [9] 44 wherein said organic material is a polymer of an olefinically unsaturated monomer.

I 171 173 12. A composition of claim [11] 9 wherein said compound has Formula I[.] and R is a substituted phenyl group.

I 171 173 13. A composition of claim 12 wherein n is 2 and said substituents are selected from alkyls having 1-20 carbon atoms, [aryls having 6-12 carbon atoms] phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl, 4-sec-hexylphenyl, aralkyls having 7-12 carbon atoms, cycloalkyls having 5-8 carbon atoms, [hydroxy,] alkoxy having 1-12 carbon atoms, aryloxy having 6-12 carbon atoms, halo, [alkoxycarbonylalkyl having 1-20 carbon atoms in its alkoxy moiety and 1-3 carbon atoms in its alkyl moiety, alkoxycarbonyl having 1-20 carbon atoms in its alkoxy moiety] and acyloxy having 1-4 carbon atoms.

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ETHYL  
*D. B. O'Neil*  
171

14. A composition of claim 13 wherein said substituents are selected from alkyl having 1-20 carbon atoms [and alkoxy carbonylalkyl having 1-20 carbon atoms in its alkoxy moiety and 4 1-3 carbon atoms in its alkyl moiety].

171 173  
*D. B. O'Neil* 173  
17. A composition of claim [14] 12 wherein said fluorophosphite compound is bis(4-octadecyloxycarbonylethyl-2,6-di-tert-butylphenyl) fluorophosphite.

171  
*D. B.*  
171 173  
171 173  
17. A composition of claim 9 wherein said fluorophosphite compound has Formula II wherein said substituents are selected from alkyl having 1-20 carbon atoms, [aryl having 6-12 carbon atoms,] phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl, 4-sec-hexylphenyl, aralkyl having 7-12 carbon atoms, cycloalkyl having 5-8 carbon atoms, [hydroxy,] alkoxy having 1-12 carbon [toms] atoms, aryloxy having 6-12 carbon atoms and halo, and X is selected from the group consisting of a single bond connecting R<sup>1</sup> and R<sup>2</sup> and divalent bridging groups selected from divalent aliphatic hydrocarbon groups containing 1-12 carbon atoms, -O- and -S-, wherein q is an integer from 1-3.

171 173  
*D. B.*  
173  
23. A composition of claim 20 wherein said fluorophosphite compound is [22,2,]  
2,2'-bis(4,6-di-tert-butylphenyl) fluorophosphite.

171  
24. A composition of claim 9 wherin said fluorophosphorus compound has Formula III wherein said substituents are selected from alkyls having 1-20 carbon atoms, [aryls

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ETHYL

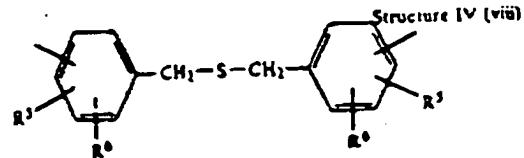
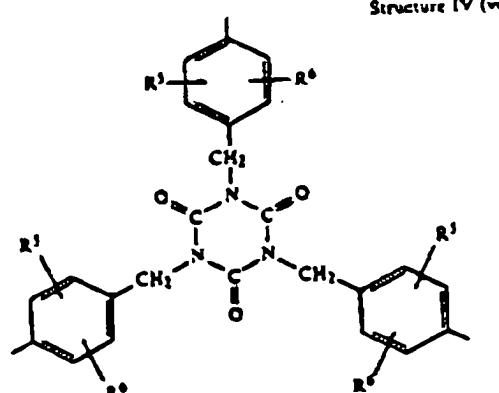
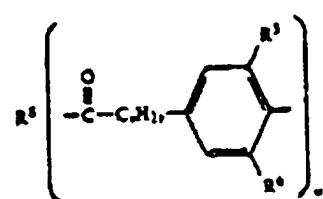
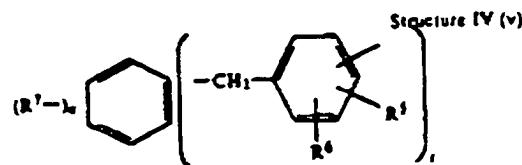
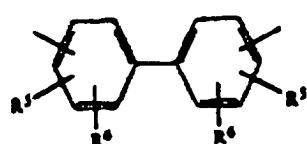
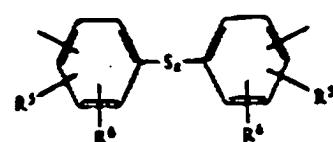
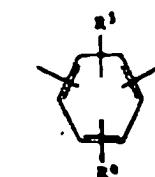
I  
P  
G  
I  
173 having 6-12 carbon atoms,] phenyl, o-tolyl, p-tolyl, naphthyl, 4-phenylphenyl, 4-sec-  
hexylphenyl, aralkyls having 7-12 carbon atoms, cycloalkyls having 5-8 carbon atoms,  
173 [hydroxy,] alkoxy having 1-12 carbon atoms, aryloxy having 6-12 carbon atoms, halo,  
alkoxycarbonylalkyl having 1-20 carbon atoms in its alkoxy moiety and 1-3 carbon atoms in its  
alkyl moiety, alkoxycarbonyl having 1-20 carbon atoms in its alkoxy moiety and acyloxy having  
1-4 carbon atoms, and R<sup>3</sup> is selected from alkyl having 1-20 carbon atoms, cycloalkyl having  
171 173 5-8 carbon atoms and aralkyls having 7-12 carbon atoms which are bonded through [oxygen]  
I oxygen to phosphorus and aryls having 6-12 carbon atoms, alkyl having 1-20 carbon atoms,  
cycloalkyls having 5-8 carbon atoms and aralkyls having 7-12 carbon atoms which are bonded  
directly to said phosphorus.

171 [25. A composition of claim 9 wherein said fluorophosphorus compound has  
173 Formula IV.]

171 [26. A composition of claim 25 whrerein A has a structure selected from:

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AN 5585/RE



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ETHYL

wherein R<sup>5</sup> and R<sup>6</sup> are hydrogen or alkyl having 1-12 carbon atoms, y is an integer from 2 to 3, x is an integer from 1 to 3, t is an integer from 2 to 3, u is an integer from 0 to 4, (t+u) equals 2 to 6, w is an integer from 1 to 4, R<sup>7</sup> is hydrogen or an alkyl having 1 to 6 carbon atoms, R<sup>8</sup> is an aliphatic hydrocarbon radical having 1-30 carbon atoms and having valence w, v is an integer from 0-4, R<sup>9</sup> is an aliphatic hydrocarbon radical having 1 to 6 carbon atoms and having valence y.]

(173)

[27. A composition of claim 26 wherein said fluorophosphorus compound is 2,5-

(173)

di-tert-butyl-1,4-phenylene bis (difluorophosphite).]

(171)

[28. A composition of claim 26 wherein said fluorophosphorus compound is 4,4'-

(173)

methylenebis(2,6-di-tert-butylphenyl) bis(difluorophosphite).]

(171)

[29. A composition of claim 26 wherein said fluorophosphite compound is the tris(difluorophosphite ester) of 1,3,5-tris(3,5-di-tert-butyl-4-hydroxybenzyl)-2,4,6-trimethyl

(173)

benzene.]

(171)

[30. A composition of claim 26 wherein said fluorophosphorus compound is the tetrakis(difluorophosphite ester) of tetrakis(methylene 3-(3,5-di-tert-butyl-4-hydroxyphenyl)

(173)

propionate)methane.]

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ETHYL

*D6*  
*OK*

[31. A composition if claim 26 wherein said fluorophosphite compound is  
173 difluorophosphite ester of octadecyl 3-(3,5,-di-tert-butylhydroxyphenyl)propionate.]

*D9*  
171

[41. An organic composition of claim 39 further characterized by containing  
173 about 0.005-5 wt. percent of a phenolic antioxidant.]

171

[42. An organic composition of claim 25 further characterized by containing  
173 about 0.005 -5 wt. percent of a phenolic antioxidant.]

I

--43. A aromatic fluorophosphorus compound suitable for use as an antioxidant,  
said compound being selected from the group consisting of bis(2,4-di-tert-butylphenyl)  
fluorophosphite; bis(4-octadecyloxycarbonylethyl-2,6-di-tert-butylphenyl) fluorophosphite; and  
4,4'-methylenebis(2,6-di-tert-butylphenyl)bis (difluorophosphite).--

--44. A compound of claim 1 combined in an antioxidant amount with an organic  
material normally susceptible to gradual oxidative degradation when in contact with oxygen.--

#### REMARKS

Applicants respectfully request reconsideration in view of the amendment and the following remarks. This Amendment lists all the changes made to claims throughout the entire reissue prosecution. Claim 8 has been amended as suggested by the Examiner. A supplemental